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EXAMINER

MILLS, DONALD L

ART UNIT PAPER NUMBER

2616

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/748,258

Applicant(s)

OKAJIMA ET AL.

Examiner

Donald L. Mills

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-12 is/are allowed.
- 6) ☒ Claim(s) 1-8 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins in view of Ayoub et al. (WO 99/33305), hereinafter referred to as Ayoub.

Regarding claim 1, Perkins discloses a system and method for mobile IP networks, which comprises: *destination information inclusive of a description of a state of a mobile terminal that is a state of movement or a state of environment in which the mobile terminal is placed, for transmission of the packet to one or more mobile terminals having a state that matches said state of a mobile terminal* (the care-of address, by definition is a description of a state of a mobile as it relates to roaming, in the header when the mobile moves to an area, state of movement, served by a foreign agent for transmission to the mobile that is roaming; page 86, left-hand column.)

Perkins does not disclose *said destination information indicating a destination without identifying an address of the destination.*

Ayoub teaches estimating the current speed of the mobile station through the cell network and reporting an estimated speed to the network at cell updates (See page 10, lines 6-11.)

It would have been obvious to one of ordinary skill at the time of the invention to implement the speed estimation and reporting of Ayoub in the system of Perkins. One of

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ordinary skill in the art would have been motivated to do so in order to manage the paging of moving mobile terminals, especially for rapidly moving mobile terminals. An added benefit of doing so would result in decreased datagrams delivered to the wrong care-of address.

Regarding claim 2, the primary reference further teaches *destination information specifies conditions of movement of a mobile terminal* (the destination information being the care-of address which indicates whether the mobile has migrated to an area served by a foreign agent; page 86, left-hand column.)

Regarding claims 3 and 4 as explained in the rejection of claim 1, Perkins discloses all the claim limitations of claim 1 (parent claim).

Perkins does not disclose *destination information specifies speed of a mobile terminal*.

Ayoub teaches estimating the current speed of the mobile station through the cell network and reporting an estimated speed to the network at cell updates (See page 10, lines 6-11.)

It would have been obvious to one of ordinary skill at the time of the invention to implement the speed estimation and reporting of Ayoub in the system of Perkins. One of ordinary skill in the art would have been motivated to do so in order to manage the paging of moving mobile terminals, especially for rapidly moving mobile terminals. An added benefit of doing so would result in decreased datagrams delivered to the wrong care-of address.

Regarding claims 5 and 6 as explained in the rejection of claim 1, Perkins discloses all the claim limitations of claim 1 (parent claim).

Perkins does not disclose *a plurality of speeds*.

Ayoub teaches estimating the current speed of the mobile station through the cell network and reporting an estimated speed to the network at cell updates (See page 10, lines 6-11.)

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It would have been obvious to one of ordinary skill at the time of the invention to implement the speed estimation, including the error tolerance, and reporting of Ayoub in the system of Perkins. One of ordinary skill in the art would have been motivated to do so in order to manage the paging of moving mobile terminals, especially for rapidly moving mobile terminals. An added benefit of doing so would result in decreased datagrams delivered to the wrong care-of address.

Regarding claim 7, Perkins discloses a system and method for mobile IP networks, which comprises:

Making any given one of the communication routers keep track of information about conditions of mobile terminals that can communicate with and send said information to said any given one of the communication routers (the information being whether the mobile terminal has migrated to an area served by a foreign node; page 86, left-hand column; the mobile receives packets with a care-of address in the header when the mobile moves to an area served by a foreign agent the home agent keeps track of the mobile's care-of address;)

Making each of the routers transfer a packet to other routers after checking destination information when the packet, traveling through the packet communication network, includes information inclusive of a description of a state of a mobile terminal that is a state of movement or a state of environment in which the mobile terminal is placed, for transmission of the packet to one or more mobile terminals having a state that matches said state of a mobile terminal (the care-of address, by definition is a description of a state of a mobile as it relates to roaming, in the header when the mobile moves to an area, state of movement, served by a foreign agent for transmission to the mobile that is roaming; page 86, left-hand column;)

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Making the communication routers transfer the packet through radio to mobile stations that can communicate with the communication routers if the information identifying a packet destination stored in the header portion of the packet matches the information about the conditions of mobile terminals kept track of by the communication routers (the packets are tunneled from source to destination; page 86, left-hand column.)

Perkins does not disclose *destination information specifies speed of a mobile terminal.*

Ayoub teaches estimating the current speed of the mobile station through the cell network and reporting an estimated speed to the network at cell updates (See page 10, lines 6-11.)

It would have been obvious to one of ordinary skill at the time of the invention to implement the speed estimation and reporting of Ayoub in the system of Perkins. One of ordinary skill in the art would have been motivated to do so in order to manage the paging of moving mobile terminals, especially for rapidly moving mobile terminals. An added benefit of doing so would result in decreased datagrams delivered to the wrong care-of address.

Regarding claim 8, the primary reference further teaches *wherein the information identifying a packet destination in the header portion of the packet is information about movement of a mobile terminal* (the care-of address, destination information, in the header when the mobile moves to an area, state of a mobile terminal, served by a foreign agent; page 86, left-hand column.)

Regarding claim 13, Perkins discloses a system and method for mobile IP networks, which comprises:

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Specifying a destination of the packet by a state of a mobile terminal (the care-of address, destination, in the header when the mobile moves to an area, state of a mobile terminal, served by a foreign agent; page 86, left-hand column;)

Generating a packet inclusive of information inclusive of a description of a state of a mobile terminal that is a state of movement or a state of environment in which the mobile terminal is placed, for transmission of the packet to one or more mobile terminals having a state that matches said state of a mobile terminal (the care-of address, by definition is a description of a state of a mobile as it relates to roaming, in the header when the mobile moves to an area, state of movement, served by a foreign agent for transmission to the mobile that is roaming; page 86, left-hand column.)

Perkins does not disclose *destination information specifies speed of a mobile terminal*.

Ayoub teaches estimating the current speed of the mobile station through the cell network and reporting an estimated speed to the network at cell updates (See page 10, lines 6-11.)

It would have been obvious to one of ordinary skill at the time of the invention to implement the speed estimation and reporting of Ayoub in the system of Perkins. One of ordinary skill in the art would have been motivated to do so in order to manage the paging of moving mobile terminals, especially for rapidly moving mobile terminals. An added benefit of doing so would result in decreased datagrams delivered to the wrong care-of address.

Allowable Subject Matter

3. Claims 9-12 allowed.

Response to Arguments

4. Applicant's arguments filed 23 May 2006 have been fully considered but they are not persuasive.

Rejection Under 35 USC 102

On page 3 of the remarks, regarding claims 1-8 and 13, the Applicant argues neither Perkins nor Ayoub alone nor in combination teach or render obvious *destination information indicating a destination without identifying an address of the destination*. The Examiner respectfully disagrees. Ayoub teaches estimating the current speed of the mobile station through the cell network and reporting an estimated speed to the network at cell updates (See page 10, lines 6-11.) The Examiner equates the destination information, which does not identify an address, to the current speed of the mobile station. Therefore, Ayoub teaches *destination information indicating a destination without identifying an address of the destination*. The Applicant also argues that the instant invention delivers a packet to a destination based upon a description of a state of a mobile terminal, however, the claims do not reflect such a limitations. Instead the claims recite *a description of a state of a mobile terminal that is a state of movement or a state of environment in which the mobile terminal is packed, for transmission of the packet to one or more mobile terminals having a state that matches the state of a mobile terminal....* Should the claims be amended to recite a limitation describing the transmission of the packet to a mobile terminal having a state that matches the description of a state one could overcome the prior art.

Conclusion

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5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L. Mills whose telephone number is 571-272-3094. The examiner can normally be reached on 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Donald L Mills

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August 15, 2006

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